

Notice of Allowability

Application No.

10/064,775

Applicant(s)

HOFFMAN, DAVID MICHAEL

Examiner

Courtney Thomas

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/16/04.
2. ☒ The allowed claim(s) is/are 1-45.
3. ☒ The drawings filed on 15 August 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-45 are allowed.
2. The following is an examiner's statement of reasons for allowance:
3. **As per claim 1 and dependent claims 2-6**, the examiner found no reference in the prior art that disclosed or made obvious a hybrid scintillation/direct conversion computed tomography (CT) imaging system comprising: a first radiation detection detector and a second radiation detector, wherein the first radiation detector is a different type of detector than the second radiation detector; the second radiation detector configured to count attenuated X-rays and measure the energy of the attenuated X-rays as recited in independent claim 1.
4. **As per claim 7 and dependent claims 8-19**, the examiner found no reference in the prior art that disclosed or made obvious a method of imaging using a hybrid scintillation/direct conversion imaging system for differentiating material characteristics, the method comprising the step of: obtaining a hybrid scintillation/direct conversion imaging system, wherein the hybrid scintillation/direct conversion imaging system includes ... a first radiation detector and a second radiation detector, wherein the first radiation detector is a scintillator/photo-sensor detector and the second radiation detector is a direct conversion detector as recited in independent claim 7.
5. **As per claim 20 and dependent claims 21-29**, the examiner found no reference in the prior art that disclosed or made obvious a medium encoded with a machine-readable computer program code for differentiating material characteristics using a hybrid scintillation/direct conversion imaging system, the medium including instructions for causing a controller to implement a method comprising: operating the imaging system so as to cause the radiation

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source to emit a radiation beam toward the radiation detector apparatus such that the first radiation detector generates first detector data and the second radiation detector generates second detector data, wherein the first radiation detector is a scintillation/photo-sensor detector and wherein the second radiation detector is a direct conversion detector as recited in independent claim 20.

6. **As per claim 30 and dependent claims 31-35**, the examiner found no reference in the prior art that disclosed or made obvious a hybrid scintillation/direct conversion imaging system comprising: a first radiation detection detector and a second radiation detector, wherein the first radiation detector is a different type of detector than the second radiation detector; the second radiation detector configured to count attenuated X-rays and measure the energy of the attenuated X-rays as recited in independent claim 30.

7. **As per claim 36 and dependent claims 37-45**, the examiner found no reference in the prior art that disclosed or made obvious a method for differentiating material characteristics using a hybrid scintillation/direct conversion imaging system, the method comprising: operating the imaging system to emit a radiation beam toward the radiation detector apparatus such that the first radiation detector generates first detector data and the second radiation detector generates second detector data, wherein the first radiation detector is a scintillation/photo-sensor detector and wherein the second radiation detector is a direct conversion detector as recite in independent claim 36.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (571) 272-2496. The examiner can normally be reached on M - F (9 am - 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CT
Courtney Thomas


EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER